

Sub
G'
E1

(a) [providing upstream of said promoter] transfecting the eukaryotic host cell with six copies of an enhancer element [comprising the nucleotide sequence TTCTGAGAA], and

(b) exposing the DNA construct to a hormone selected from the group consisting of lactogenic hormones, somatogenic hormones and mixtures thereof;

wherein the enhancer element comprises the nucleotide sequence TTCTGAGAA, with the proviso that the nucleotide sequence does not contain the DNA sequence of nucleotide sequence SEQ ID NO:1, and wherein the enhancer element is responsive to both lactogenic hormones and somatogenic hormones.

E2

2. (Three Times Amended) The method according to claim 1, wherein the enhancer element consists essentially of the nucleotide sequence TTCTGAGAA [is the SPI-growth hormone responsive element (SPI-GHRE)].

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E3

5. (Three Times Amended) An enhancer element which when used in a DNA construct for transfection of a eucaryotic host cell is responsive to hormonal stimuli, said enhancer element consisting essentially of [comprising] the nucleotide sequence TTCTGAGAA, with the proviso that said nucleotide sequence is not the DNA sequence of SEQ ID NO:1 [the SPI-growth hormone responsive element (SPI-GHRE)], and that the enhancer element is responsive to both lactogenic hormones and somatogenic hormones.

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E4

8. (Twice Amended) An expression vector comprising a structural gene encoding a desired protein or polypeptide and a promoter, wherein the vector further comprises six copies of an enhancer element consisting essentially of the nucleotide sequence TTCTGAGAA, with the proviso that the nucleotide sequence is not the nucleotide sequence SEQ ID NO:1 [SPI-growth hormone responsive element (SPI-GHRE)].

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E5

10. (Three Times Amended) The expression vector according to claim 9, wherein said enhancer element comprises at least one copy of the nucleotide sequence SEQ ID NO:1 [the SPI-growth hormone responsive element (SPI-GHRE)].

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E8

19. (Twice Amended) An in vitro method of enhancing the transcription of a gene in a DNA construct comprising a structural gene and a promoter upstream of the structural gene, the method comprising;

- (a) placing the DNA construct in an eukaryotic host cell wherein transcription can occur;
- (b) [providing upstream of the promoter] transfecting the eukaryotic host cell with at least one enhancer element consisting [essentially] of the nucleotide sequence TTCTGAGAA, and
- (c) exposing the DNA construct to a hormone selected from the group consisting of lactogenic hormones, somatogenic hormones and mixtures thereof.

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G6
E7

23. (Twice Amended) An enhancer element responsive to a hormone selected from the group consisting of lactogenic hormones, somatogenic hormones and mixtures thereof when the enhancer element is used in a DNA construct for transfection of a eukaryotic host cell; wherein the enhancer element consists essentially of the nucleotide sequence TTCTGAGAA, with the proviso that the nucleotide sequence is other than the nucleotide sequence of SEQ ID NO:1 [the SPI-GHRE].

E8

25. (Twice Amended) An enhancer element according to claim 24, wherein the hormone is selected from the group consisting of prolactin, placenta lactogen and mixtures thereof [, and wherein the enhancer element consists essentially of the nucleotide sequence TTCTGAGAA, with the proviso that the nucleotide sequence is other than the nucleotide sequence: GATCTACGCTTCTACTAATCCATGTTCTGAGAAATCATCCAGTCTGCCCCATG].

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E8

27. (Twice Amended) An expression vector comprising a structural gene encoding a [structural] protein, a promoter, and at least one enhancer element consisting essentially of the nucleotide sequence TTCTGAGAA, with the proviso that the nucleotide sequence is other than the nucleotide sequence SEQ ID NO:1 [GATCTACGCTTCTACTAATCCATGTTCTGAGAAATCATCCAGTCTGCCCCATG].

E10 28. (Amended) An expression vector according to claim 27, wherein the enhancer element consists of the nucleotide sequence TTCTGAGAA and is responsive to a hormone selected from the group consisting of growth hormone, prolactin, placenta lactogen and mixtures thereof.

Sub 98
E11 30. (Amended) A DNA comprising a promoter, a structural gene, and at least one enhancer element [comprising] consisting essentially of the nucleotide sequence TTCTGAGAA, with the proviso that the nucleotide sequence is other than the nucleotide sequence SEQ ID NO:1 [: GATCTACGCTTCTACTAATCCATGTTCTGAGAAATCATCCAGTCTGCCCCATG].

E12 31. (Amended) A DNA according to claim 30, comprising from one to six enhancer elements [, wherein each enhancer element consists essentially of the nucleotide sequence TTCTGAGAA.]

32. (Amended) A DNA according to claim 30, wherein each enhancer element consists [essentially] of the nucleotide sequence TTCTGAGAA.

Sub 99
E13 34. (Twice Amended) ~~An in vitro method of enhancing the transcription of a gene in a DNA construct comprising a structural gene, [and] a promoter upstream of the structural gene, and at least one enhancer upstream of the promoter; the method comprising placing the DNA construct in an environment wherein transcription can occur; [providing upstream of the promoter at least one enhancer element consisting essentially of the nucleotide sequence TTCTGAGAA,] and exposing the DNA construct to a hormone selected from the group consisting of lactogenic hormones, somatogenic hormones and mixtures thereof; wherein the enhancer element consists essentially of the nucleotide sequence TTCTGAGAA, with the proviso that the nucleotide sequence is other than the nucleotide sequence SEQ ID NO:1 [:GATCTACGCTTCTACTAATCCATGTTCTGAGAAATCATCCAGTCTGCCCCATG].~~

E14 41. (Amended) An in vitro method of enhancing transcription of a structural gene, comprising the steps of:

- E14
- (a) preparing a plasmid DNA construct comprising a structural gene, a promoter upstream of the structural gene, and at least one enhancer consisting of the sequence TTCTGAGAA upstream of the promoter;
 - (b) transfecting a cell with the plasmid DNA construct; and
 - (c) exposing the cell to [a hormone selected from the group consisting of growth hormone,] prolactin [and mixtures thereof].

Sub G¹⁵
44. (Amended) An isolated DNA construct comprising a promoter and six repeats of an enhancer, wherein the enhancer consists essentially of the sequence TTCTGAGAA.

Sub G¹⁶
46. (Amended) An in vitro method of enhancing the transcription of a gene [in a DNA construct incorporated into the genome of a eukaryotic host cell, wherein the DNA construct comprises a structural gene and a gene promoter upstream of the structural gene], the method comprising the steps of:

- E16
- (a) providing a cell comprising the gene and a promoter,
 - (b) [(a)] [providing upstream of the promoter] transfecting the cell with a DNA construct comprising at least one copy of the nucleotide sequence TTCTGAGAA, and
 - (c) [(b)] exposing the DNA construct to prolactin.

Sub G¹²
47. (Amended) An in vitro method according to claim 46, comprising the step of providing [upstream of the promoter] multiple copies of the nucleotide sequence TTCTGAGAA.

Sub G¹³
48. (Amended) An in vitro method according to claim 47, comprising the step of providing [upstream of the promoter] six copies of the nucleotide sequence TTCTGAGAA.

Please add the following claims:

Sub G¹⁴
E17
--49. An in vitro method according to claim 19, wherein the step of placing the DNA construct in an environment wherein transcription can occur comprises transfecting an eukaryotic cell with a plasmid comprising the DNA construct.--